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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,207	10/09/2001	Bernard Haveaux	F-727-DIV	7424

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EXAMINER

TARAZANO, DONALD LAWRENCE

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 05/07/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,207

Applicant(s)

HAVEAUX ET AL.

Examiner

D. Lawrence Tarazano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-60 is/are pending in the application.
- 4a) Of the above claim(s) 40-42, 46-50 and 52-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-39, 43-45, 51 and 57-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/233,829.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group 1 in Paper No. 5 is acknowledged.
2. Claims 40-42, 45-50, 52-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. The examiner has included 43-45 and 57-58 in addition to the claims identified by the applicants in paper 5.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear if the applicants are merely claiming a conventional article made out of plaster or the mold itself made out of plastic.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 34, 36, 37, 38, 43-45, 57, and 58 are rejected under 35 U.S.C. 102(b) as being anticipated by Palackal et al. (EPO 0 628 577).

Palackal et al. teach syndiotactic polypropylene block polymers in which they have a heterotactic component (rm) corresponding to the applicants atactic segment and a syndiotactic segment (rr) of over 70%. In the document these components are described as being “blocks” as claimed.

These syndiotactic polymers “can be molded by heat to form shaped objects” and “can be used for blending with polymer of different tacticity to vary the properties of such polymers”.

They can be molded so that the can be formed in to shapes or hollow articles. While claim 44 is directed to a “plaster cast”, the examiner interprets this as a hollow or molded plastic article that is can be used as a mold for plaster. For the record: Molded articles have been made out of plaster for centuries (e.g. the plaster molding in the dining room in Mount Vernon, or many Victorian houses).

The term “polymers of different tacticity” is interpreted as being materials such as isotactic and atactic polypropylene.

The materials taught would be thermoplastic in nature, so they would be solid as room temperature and become soft when heated.

While claim 58 is directed to a recycled material, this is treated as a process limitation since it only notes from where the polymer comes from and not what structure it may have.

The material would be somewhat radiation resistant (no particular amount of radiation resistance as claimed).

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Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 39 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Palackal et al. (EPO 0 628 577)

8. Palackal et al. as discussed above teach syndiotactic / atactic polypropylene and such materials used in blends.

9. Regarding claim 39, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have varied the mixture of the two polymers since generically blends are taught; furthermore, the applicants range is very large and there is no evidence of criticality of the particular amounts.

10. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have added conventional fillers to the materials taught by Palackal et al. when an opaque material was desired.

11. Claims 34-39, 43-45, 51, and 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al. in view of Job (WO 90/12816).

Keller et al. teach multilayer biaxially oriented shrinkable laminates which comprise core layer of isotactic polypropylene which has been modified with a material such as syndiotactic polypropylene which decreases the isotacticity of the main isotactic polymer (column 4, lines 41-

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65; column 12, lines 38+) and has surface layers comprising materials such as isotactic polypropylene among others (column 7, lines 57+).

Job teaches block copolymers, which comprise high percentages of Syndiotactic mol% (rr), and lesser amounts of Isotactic mol% (mm), and Defective mol% (rm) as discussed above.

Regarding the limitation that the polymer has a molecular weight of 120 k Daltons, the polymers taught by Job have low melt indexes (table 1). This would be indicative of materials having high molecular weight. The examiner takes official notice that the size of the polymer affects the ability of the polymer to flow in which large polymers do not flow as well as a smaller molecular weight polymer having the same structure would. Based on the melt flow index recited, there is clear reason to believe that the polymers taught by Job would have a molecular weight above 120 k Dalton as claimed. Also see the applicant's table 2, (Mw 1000 (molecular weight) vs. MFI (Melt Flow Index) which follows this same trend.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the syndiotactic polymers taught by Job as the syndiotactic polymeric component which functions as a tacticity modifier in the core layer of the films taught by Keller et al. since the syndiotactic polymers in general provide that function.

Conclusion

The examiner cites US006348272B1 as the parent application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Lawrence Tarazano whose telephone number is (703)-308-2379. The examiner can normally be reached on 8:30 to 6:00 (off every other Friday).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on (703)-309-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9310 for regular communications and (703)-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0661.

D. Lawrence Tarazano
Primary Examiner
Art Unit 1773

A handwritten signature in black ink, appearing to be 'DLT' with a large loop over the 'T'.

dlt
May 5, 2003